

I. REMARKS

Claims 1 and 8 to 13 are pending. No claims are amended, withdrawn, added, or canceled as a result of this response.

1. Claim Rejections under 35 U.S.C. § 101:

Claims 1 and 8 to 13 were rejected under 35 U.S.C. § 101, because the claimed invention allegedly “lacks patentable utility.” Office Action at page 3. The Applicants respectfully traverse this rejection.

The Examiner admits that “(t)he specification discloses that the nucleic acid molecules may be used as molecule tags to isolate genetic regions, isolate genes, map genes and determine gene function (page 15), in marker-assisted breeding programs (page 16), as antibodies (page 16), as primer and probes for the isolation of full length cDNAs or genes (page 28), in mutation detection (page 37), in the identification of polymorphism (page 38), as molecular markers (page 50), genetic mapping studies (page 49), in DNA-protein interaction (page 52) in methods of identifying chromosomes with translocation (page 52), in method of protein-protein interaction (page 60), in microarray based methods (page 54), in site directed mutagenesis (page 56) and in methods of transformation (page 61).” *Id.* at page 3. However, the Examiner does not consider any of these disclosed utilities as persuasive because “(n)one of theses (*sic*) asserted utilities are specific because the disclosed uses of the nucleic acids are generally applicable to any nucleic acid and therefore not particular to the nucleic acid sequence being claimed.” *Id.*

A BLASTN analysis is a well-known and conventional technique for one of ordinary skill in the art. *See*, specification page 5, line 7 to page 6, line 11. The results of a BLASTN analysis of the claimed SEQ ID NO: 5981 is shown below. As these results show, the claimed

nucleotide sequence shows 94 percent identity to a sequence obtained from water-stressed

Glycine max:

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>gb|CX706978.1| gmrtDrNS01_19-C_M13R_C04_028.s4 Water stressed 48h segment 2
      gmrtDrNS01 Glycine max cDNA 3', mRNA sequence.
      Length = 829

Score = 640 bits (323), Expect = 0.0
Identities = 393/416 (94%), Gaps = 4/416 (0%)
Strand = Plus / Plus
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This sequence was obtained by Valliyodan, B., Huang, S., Joshi, T., Hernandez, A., Spollen, W.G., Bohnert, H.J., Duke, M.V., Liu, X., Scheffler, B.E., Sharp, R.E., Xu, D., Springer, G.K., Stacey, G. and Nguyen, H.T. in an unpublished 2005 study entitled "EST Analysis of Soybean Root Tip Under Drought Stress: MSMC Grant 002245 - Development and Deployment of Biotechnology Tools for Soybean Improvement".

In other words, the claimed nucleotide sequence has utilities specific to it and not generally applicable to any nucleic acid. For example, the claimed nucleic acid sequence can be used to isolate genes, map genes, and determine gene function associated with water stress. These utilities are credible, substantial, and well-established; they are neither vague nor impractical. The Applicants need only establish a single utility to satisfy 35 U.S.C. § 101, and have done so in the present case.

The Applicants respectfully remind the Examiner that the utilities asserted in the specification must be accepted as factually sound unless the Patent Office cites information that undermines the credibility of the assertion. *In re Brana*, 51 F.3d 1560, 1567, 34 U.S.P.Q.2d 1436, 1441 (Fed. Cir. 1995). As the Examiner is aware, "a 'rigorous correlation' need not be shown in order to establish practical utility; 'reasonable correlation' is sufficient." *See, Fujikawa v. Wattanasin*, 93 F.3d 1559, 1565, 39 U.S.P.Q.2d 1895, 1900 (Fed. Cir. 1996), emphasis added.

“An Applicant can establish this reasonable correlation by relying on statistically relevant data documenting the activity of the compound or composition, arguments or reasoning, documentary evidence, or any combination thereof.” M.P.E.P. § 2107.03, at page 2100-43. The BLASTN analysis provides such a reasonable correlation through sequence identity: a 94 percent identity to a sequence obtained from water-stressed *Glycine max* is a reasonable correlation.

In conclusion, because Applicants need only establish a single utility to satisfy 35 U.S.C. § 101, and have done so with sufficient specificity and reasonable correlation in the present application, the rejection under 35 U.S.C. § 101 is incorrect and the Applicants respectfully request its withdrawal.

2. Claim Rejections under 35 U.S.C. § 112, first paragraph:

Claims 1 to 16 and 35 to 38 were rejected under 35 U.S.C. § 112, first paragraph. Office Action at page 5. First, the Applicants respectfully remind the Examiner that claims 1 and 8 to 13 are pending. Second, the Applicants respectfully traverse this rejection, with respect to the pending claims, and contend that this rejection has been overcome by the arguments set forth above with respect to the rejection under 35 U.S.C. § 101. Consequently, the rejection under 35 U.S.C. § 112, first paragraph, is improper and the Applicants respectfully request reconsideration and withdrawal of this rejection.

III. CONCLUSION

In view of the foregoing amendments and remarks, the Applicants respectfully submit that the present application is now in condition for allowance, and respectfully request notice of such. The Examiner is encouraged to contact the undersigned at 202-942-5746 if any additional information is necessary for allowance.

Respectfully submitted,

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